

#### Certified U.S. Mail No. 7013 3020 0001 8471 6672 Return Receipt No. 9590 9401 0002 5166 7516 33

February 12, 2016

Office of Enforcement and Compliance Assurance Office of Federal Activities International Compliance Assurance Division (2254A) **Environmental Protection Agency** 1200 Pennsylvania Ave., NW Washington, DC 20460

Re:

2015 Export Annual Report

Valero Refining - Texas, L.P. - Texas City Refinery

Industrial Solid Waste Registration No. 30011

EPA ID No. TXD000792937

TCEQ Regulated Entity Number: RN100238385 TCEQ Customer Reference Number: CN600127468

#### Dear Administrator:

Valero Refining – Texas, L.P. (Valero) is submitting this Annual Report for the 2015 calendar year for hazardous waste that was exported to foreign countries for metals reclamation from the Valero Texas City Refinery.

This report has been prepared in accordance with the requirements of 40 CFR §262.87.

#### (a)(1) The EPA identification number, name, and mailing and site address of the notifier filing the report:

EPA Id No.:

TXD000792937

Name:

Valero Refining – Texas, L.P., Texas City Refinery

Mailing

P.O. Box 3429

Address:

Texas City, TX 77592

Site Address:

1301 Loop 197 South @ 14th St.

Texas City, TX 77590

#### (a)(2) The calendar year covered by the report: 2015

#### (a)(3) The name and site address of each final recovery facility:

Name:

EG Metal Corporation

Site Address:

687 Cheoyong-Ro

Namgu, Ulsan, Korea

(a)(4) By final recovery facility, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number (from 40 CFR part 261, subpart C or D), designation of waste type(s) from OECD waste list and applicable waste code from the OECD lists, DOT hazard class, the name and US EPA ID number (where applicable) for each transporter used, the total amount of waste shipped pursuant to this Subpart, and number of shipments pursuant to each notification:

Recovery Facility: EG Metal Corporation

Hazardous Waste Description: Middle Distillate Hydrotreating Catalyst

EPA Hazardous Waste No.: K171

OECD Waste Type: Spent Catalyst Excluding Liquids used as Catalyst,

Transition Metals (Cobalt and Molybdenum)

OECD Waste Code: B1120 DOT Hazard Class: 4.2

Transporter Name: Triad Transportation, Inc.

Transporter U.S. EPA ID No.: OKD981588791
Amount of Waste Shipped: 942,492 Lbs.
Number of Shipments: 32 Shipments

Recovery Facility: EG Metal Corporation

Hazardous Waste Description: Diesel Hydrotreating Catalyst

EPA Hazardous Waste No.: K171

OECD Waste Type: Spent Catalyst Excluding Liquids used as Catalyst,

Transition Metals (Cobalt and Molybdenum)

OECD Waste Code: B1120 DOT Hazard Class: 4.2

Transporter Name: Triad Transportation, Inc.

Transporter U.S. EPA ID No.: OKD981588791 Amount of Waste Shipped: 116,198 Lbs. Number of Shipments: 4 shipments

- (a)(5) In even numbered years, for each hazardous waste exported, except for hazardous waste produced by exporters of greater than 100 kg but less than 1000 kg in a calendar month, and except for hazardous waste for which information was already provided pursuant to §262.41:
  - (i) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and

The Source Reduction Waste Minimization Plan 2013-2017 Executive Summary can be found in Attachment I.

(ii) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984:

Valero Texas City Refinery continues to implement provisions of the *Source Reduction Waste Minimization Plan 2013-2017*. As required by that plan and associated reporting requirements, the annual progress report on source reduction and waste minimization activities will be submitted by July 1, 2016 to the Texas Commission on Environmental Quality and will be available upon request.

#### (a)(6) A certification signed by the primary exporter:

See Attachment II.

Should you have any questions or require additional information, please call me at (409) 948-7551 or via e-mail at grant.gutierrez@valero.com.

Sincerely,

Grant Gutierrez

**Environmental Engineer** 

**Enclosures** 

cc: HS&E Library File: SW-03-01 (2016 Export Annual Report)

### ATTACHMENT I

## SOURCE REDUCTION WASTE MINIMIZATION PLAN 2013-2017 EXECUTIVE SUMMARY



#### U.S. Certified Mail No. 7010 0780 0001 7712 4528

December 29, 2011

Texas Commission on Environmental Quality Pollution Prevention Team Attn: P2 Plans (MC-113) PO Box 13087 Austin, TX 78711-3087

Re:

Source Reduction/Waste Minimization Plan - Executive Summary

Valero Refining-Texas, L.P.

Texas City Refinery, Galveston County Solid Waste Registration No. 30011 Regulated Entity No. RN100238385 Customer Reference No. CN600127468

Dear Sir or Madam:

Per 30 TAC § 335, Subchapter Q requirements, Valero Refining – Texas, L.P. (Valero) is submitting the Source Reduction/Waste Minimization Plan - Executive Summary for years 2013 through 2017 for the Texas City Refinery.

If you have any questions, please contact me at (409) 948-7215.

Sincerely,

Gino Paganucci

Staff Environmental Engineer

Enclosure

cc:

HS&E Library File SW-03-05 (SR/WM Plan)

## Source Reduction and Waste Minimization Pollution Prevention Plan for Reduction of Hazardous Wastes and TRI Compounds

Valero Refining – Texas, L.P. Texas City Refinery Texas City, Texas

5-Year Plan for Period 2013-2017

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Table 1 - Hazardous Waste Data

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# Pollution Prevention Plan For Reduction of Hazardous Wastes and TRI Compound Releases For the 5-Year Period January 1, 2013 through December 31, 2017

#### EXECUTIVE SUMMARY

#### Description of Facility:

Company:

Valero Refining - Texas, L.P.

Site:

**Texas City Refinery** 

**Physical** 

**Texas City Refinery** 

Mailing

**Texas City Refinery** 

Address:

1301 Loop 197 South @ 14th St.

Address:

P.O. Box 3429

Texas City, TX 77590

Texas City, TX 77592-3429

#### **Local Contact:**

Mr. Leslie G. Rucker: Director, Health, Safety, & Environmental Affairs

409-948-7296

les.rucker@valero.com

#### **Technical Contact:**

Mr. Gino Paganucci: Staff Environmental Engineer

409-948-7215

gino.paganucci@valero.com

Valero Refining – Texas, L.P. (Valero) operates a petroleum refinery in Texas City, Texas, which processes crude oil into petroleum products. The unit operations include crude oil distillation, catalytic cracking, catalytic reforming, alkylation, isomerization, sulfur recovery, ROSE unit, hydrorefining, hydrotreating, and delayed coker operations.

The Texas City Refinery operates under the following environmental permits and registrations:

TCEQ Air Account: GB0073-P

TCEQ Solid Waste Notice of Registration: 30011

■ TPDES Wastewater Discharge Permit: 00449 (EPA ID No. TX0006009)

■ EPA Hazardous Waste Generator Identification: TXD000792937

TRI ID Number: 77592TXSCTLOOP1

SIC Code: 2911

NAICS Code: 324110

#### Hazardous Waste and TRI Constituents

The hazardous wastes generated and the reportable TRI releases at the refinery for reporting year 2010, and the volume of each, are presented in Table 1 and in Table 2.

#### Prioritized List of Pollutants

The table below indicates a prioritized list of pollutants to be reduced.

Priority	Pollutants/Waste to be Reduced
1	Sump & Sewer Sludge (F037), API/DAF Sludge (K048, K051, F038), Heat Exchanger Bundle Sludge (K050)
2	Nitrate Compounds in wastewater effluent
3	Potassium Hydroxide (D002)
4	Sodium Hydroxide (D002)

#### Reduction Goals and Considerations

Valero has defined several specific and general goals for waste minimization in the Texas City Refinery. These goals are:

- · Reduce the risk to human health and the environment,
- Reduce the cost of waste management, and
- Reduce the potential liability of waste management methods.

Valero's waste minimization goal for the priority 1 streams in the table above is 300 ton/yr (1,500 tons for 5 yr plan). The goal for each of the priority 1 waste streams is a weighted average based on the waste stream's 2010 baseline quantity. The goal for the priority 2 waste stream is to recycle approximately 250 gpm of wastewater effluent (containing nitrate compounds) to the refinery's firewater storage system. The goal for the priority 3 and 4 waste streams (spent caustic and spent KOH) is to recycle 100% each year by offsite regeneration and reuse processes. Approximately 1,395 tons of spent caustic and 853 tons of spent KOH were recycled in 2010.

#### Waste Minimization and Source Reduction Projects

Valero has considered the potential for off-site exposure resulting from releases of wastes generated at the refinery. The waste minimization projects selected for implementation will reduce the quantity of hazardous waste sent off-site for treatment and disposal, and reduce associated quantities of TRI reportable chemicals sent to landfills and treatment facilities. These projects will also reduce the quantity of reportable chemicals in wastewater discharges.

The projects included in this plan will reduce overall risks to human health and the environment. A list of source reduction and waste minimization projects planned for the period 2013-2017 and associated schedule for implementation are included in Table 3.

The schedule for future reduction goals is 300 tons per year for wastes recycled in the Delayed Coker Unit (DCU), 250 gpm of wastewater recycled to the firewater system, and 100% recycle of KOH and spent caustic for each of the 5 years included in this plan.

For the waste minimization projects included in this plan, Valero has considered the potential for pollutants from the waste minimization activities to be shifted to another medium. Emission controls are used in the DCU to limit emissions of waste constituents recycled in the DCU. Emissions generated from vacuum truck transfers of API/DAF Sludge from the Waste Water Treatment Unit to the DCU are controlled by an incinerator. Carbon canisters are used to control VOC emissions on the permanent tank (i.e., feed tank) in the DCU. The collection drums for KOH and NaOH in the Alky and Treaters Units are closed systems that vent to the flare. All recycling activities for KOH and NaOH occur offsite. The wastewater that is recycled to the firewater system and reused during refinery operations is routed to the wastewater treatment system.

#### Plan Certification

I certify that this Pollution Prevention Plan has been completed to meet the specific requirements of 30 TAC Sections 335.471-335.480, and that the information provided herein is correct and complete.

This document also certifies that I have the authority to commit the corporate resources necessary to implement this plan.

Lestie G. Rucker

Director,

Health, Safety, & Environmental Affairs

Valero Refining - Texas, L.P.

**Texas City Refinery** 

#### Hazardous Waste Data Valero Refining - Texas, L.P. Texas City Refinery Tons Per Year (except where noted)

		Waste In	formation	Estimated SR/WM	Reducti (Tons		Year Plan	2010 Baseline (Tons) <sup>1</sup>		
Waste	EPA TCEQ Waste Waste Codes Code		Activity	Mgt Method	Disposal Facility	Project	SR	WM	Total SR+WM	
GOHT (previously desidfiner Catalyst)	K172	5152393H	Turnaround/ Maintenance	010	Gulf Chemical Corporation	See Note 2				2,275.26
PI/DAF Sludge	K048, K051, F038	0011409H	Wastewater Treatment	Recycled	Delayed Coker Unit	See Note 5		7,155.00	7,155.00	1,431
pent Caustic	D002	0303109H	Turnaround/ Maintenance	Recycled	Merichem	See Note 3		6,976.95	6,976.95	1,395.39
API/DAF Sludge	K048, K051, F038	0011409H	Wastewater Treatment	039	Duratherm	DCU, See Note 4		1,198.10	1,198.10	527
Sump & Sewer Sludge	F037	0085603H	Wastewater Collection	141, 039, 040	Duratherm, Veolia P.A.	DCU, See Note 4		289.13	289.13	126.57
Ni/Mo Catalyst; Reformer	K171	4953393H	Turnaround/ Maintenance	010	Union Corporation	See Note 2				18.25
Heat Exchanger Bundle Sludge	K050	3720603H	Turnaround/ Maintenance	040	Veolia P.A.	DCU, See Note 4		14.24	14.24	6.23
Residual Catalyst Contaminated Debris	K172	3760319H	Turnaround/ Maintenance	141	Chemical Waste Mgmt Carlyss	See Note 2				3.07
Spent Lead Acid Batteries	D002, D008	1650309H	Turnaround/ Maintenance	141	Veolia P.A.	See Note 2				3.00
Contaminated Media	K050, F037, K170	3777319H	Turnaround/ Maintenance	132	Chemical Waste Mgmt Carlyss	See Note 2				2.00
Contaminated Debris	F037	3743319H	Turnaround/ Maintenance	132	Chemical Waste Mgmt Carlyss	See Note 2				1.92
Computer Monitors	D008	3758319H	Other	141	Veolia P.A.	See Note 2				1.73
Residfiner Paint Waste	D001, F003, F005	3724604H	Turnaround/ Maintenance	040	Veolia P.A.	See Note 2				1.64
API/DAF Contaminated Debris	K048, K051, F038	2705489H	Wastewater Treatment	040	Veolia P.A.	See Note 2				0.83
Ammonia Vials	D002, D009	3741110H	Wastewater Treatment	141	Veolia P.A.	See Note 2				0.71
Waste Aerosols	D001	3775219H	Turnaround/ Maintenance	040	Veolia P.A.	See Note 2				0.67
Acetylene Gas Cylinder	D001	3762801H	Turnaround/ Maintenance	132	Chemical Waste Mgmt Carlyss	See Note 2				0.49

#### Hazardous Waste Data Valero Refining - Texas, L.P. Texas City Refinery Tons Per Year (except where noted)

		Waste In	formation	Estimated SR/WM	A Reduction (Tons)		5 Year Plan	2010 Baseline (Tons) <sup>1</sup>		
Waste	EPA Waste Codes	TCEQ Waste Code	Activity	Mgt Method	Disposal Facility	Project	SR	WM	Total SR+WM	
Co/Mo Catalyst; MDHT	K171	5052393H	Turnaround/ Maintenance	040	Veolia P.A.	See Note 2				0.40
Caustic Contaminated Debris	D002	3783109H	Turnaround/ Maintenance	141	Veolia P.A.	See Note 2				0.15
Mercury Contaminated Debris	D009	3708319H	Turnaround/ Maintenance	141	Veolia P.A.	See Note 2				0.110
Oxygen Gas Cylinder	D001	3781701H	Turnaround/ Maintenance	141	Veolia P.A.	See Note 2				0.10
Phenol Vials	D002	3728110H	Wastewater Treatment	141	Veolia P.A.	See Note 2				0.10
Leaded Paint Chips	D008	2806319H	Turnaround/ Maintenance	141	Veolia P.A.	See Note 2				0.003
Total		*							15,633	5,797

#### Notes:

- 1. Baseline data for 2011 was not available at the time the SR/WM Plan was developed.
- No SR/WM activities planned. Quantities of wastes generated by turnaround/maintenance activities varies significantly each year. These wastes will be evaluated annually for SR/WM opportunities.
- Spent Caustic (0303109H) and spent KOH is regenerated offsite for reuse. Valero's WM goal is based on 2010 baseline quantity and 100% recycled each year.
- Valero's WM goal for all Delayed Coker Unit (DCU) streams is 300 Ton/yr (1,500 T for 5 yr plan). The goal for each
  of the 3 major DCU waste streams is a weighted average based on the waste stream's 2010 baseline quantity.

#### Toxic Release Inventory (TRI) Data Valero Refining - Texas, L.P. Texas City Refinery Tons Per Year (except where noted)

	4	Estimated		duction Du	ring 5 Year	Baseline Releases 2010 (Tons) <sup>1</sup>			
SARA Chemical and Activities			Plan (Tons) WM - Rel			Baseline	Baseline	Total Releases &	
Compound	Activity	Project	SR - Releases	& Transfers	Total WM & SR	Releases	Transfers	Transfers	
itrate Compounds	Wastewater collection	Firewater recycle, See Note 2				245.85	-	245.85	
anadium	Production (catalyst)	See Note 3				1.51	151.40	152.91	
ickel Compounds	Production (catalyst)	See Note 3				0.41	76.25	76.66	
mmonia	Production processes, Wastewater system	See Note 3				30.56	2.85	33.41	
ropylene	Production processes	See Note 3		æ		13.49	-	13.49	
-Hexane	Production processes	See Note 3				9.02	-	9.02	
Nolybdenum Trioxide	Production processes, Wastewater system	See Note 3				0.23	8.48	8.71	
towas	Production processes	See Note 3				6.11	-	6.11	
Cyclohexane	Production processes	See Note 3				6.09		6.09	
Toluene	Production processes	See Note 3				5.80	0.03	5.83	
Naphthalene	Production processes	See Note 3				5.08	0.18	5.2	
Benzene	Production processes	See Note 3				5.06	-	5.0	
Xylene (mixed)	Production processes	See Note 3				4.56	0.05	4.6	
Polycyclic Aromatics	Production processes	See Note 3				1.35	1.83	3.1	
1,2,4 TMB	Production processes	See Note 3				2.75	0.03	2.7	
Ethylbenzene	Production processes	See Note 3				1.63	0.01	1.6	
Cresols	Production processes	See Note 3				1.03	0.18	1.2	
Sulfuric Acid	Production processes	See Note 3	3			1.08	-	1.0	
Carbon Disulfide	Production processes	See Note 3	3			1.04	-	1.0	
Cyanide Compounds	Production processes	See Note 3	3			0.98	3 0.03	2 1.	
Lead Compounds	Production processes	See Note	3			0.14	4 0.8	5 0.	
Phenol	Production processes	See Note	3			0.4	3 0.1	7 0.	

#### Toxic Release Inventory (TRI) Data Valero Refining - Texas, L.P. Texas City Refinery Tons Per Year (except where noted)

SARA Chemical a	Estimated		duction Du (Tons)	ring 5 Year	Baseline	Releases 2	Releases 2010 (Tons) <sup>1</sup>			
Compound	Activity	Project	SR - Releases	WM - Rel & Transfers	Total WM & SR	Baseline Releases	Baseline Transfers	Total Releases & Transfers		
Mercury	Production processes	See Note 3				0.29	0.28	0.57		
Styrene	Production processes	See Note 3				0.37	-	0.37		
Hydrogen Cyanide	Production processes	See Note 3				0.35	-	0.35		
1,3, Butadiene	Production processes	See Note 3				0.28	-	0.28		
Cumene	Production processes	See Note 3				0.25	-	0.25		
Benza(G.H.I)perylene	Production processes	See Note 3				0.01	0.17	0.18		
Carbonyl Sulfide	Production processes	See Note 3				0.11	-	0.11		
Hydrochloric Acid	Production processes	See Note 3				0.10		0.10		
Hydrogen Fluoride	Production processes	See Note 3				0.04		0.04		
Tetrachloroethylene	Production processes	See Note 3				0.0035	-	0.0035		
Dioxin (gms)	Production processes	See Nate 3				0.00	-	0.00		
n-Butanol	Production processes	See Note 3				-		-		
Total Releases		12				346	243	589		

#### Notes:

- Baseline data for 2011 was not available at the time the SR/WM Plan was developed.
- 2. The approximate quantity of wastewater recycled to the firewater system is 250 gpm.
- 3. No SR/WM activities planned. Releases are mainly associated with air emissions which are minimized by various emission control and air permitting conditions and fugitive monitoring programs (LDAR). Transfers are mainly associated with waste management activities; SR/WM for transfers are addressed in Table 1 (Hazardous Waste Data). These releases and transfers will be evaluated annually for SR/WM opportunities.

### ATTACHMENT II

### PRIMARY EXPORTER CERTIFICATION

#### Certification by Primary Exporter

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Leslie G. Rucker

Director, Health, Safety, & Environmental Affairs

Valero Refining - Texas, L.P.

Texas City Refinery

2-22-16

Date



Post Office Box 3429 · Texas City, TX 77592-3429

VALERO

EPA Mail

**lte** 

: International Compliance

Stop: ARIEL RIOS NORTH

artment: 2254A

Certified



International Comp Assurance(2254A) Office of Enforcement & Compliance **Environmental Protection Agency** 1200 Pennsylvania Ave., NW Office of Federal Activities Washington, DC 20460

V0401 indd NS 2-13